

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,051	<b>Applicant(s)</b> NEWTON ET AL.	
	<b>Examiner</b> TIMOTHY R. NEWLIN	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/31/2006</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 17, 18, and 19 are rejected under §101 as nonstatutory. Claim 17 claims program code per se, and claim 18 is directed to a signal per se, both of which are nonstatutory. Claim 19 merely recites a GUI, without additional functional details. Thus, as claimed the GUI is merely image data viewable by an operator and is nonstatutory.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 19 is rejected under §112 first paragraph for undue breadth because it recites a single means (a GUI) that covers every possible structure to achieve the recited function. See *In re Hyatt*, 708 F.2d 712, 714-715, (Fed. Cir. 1983).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1, 4-6, 9-13, 16, and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by OPENTV, WO 01/33852.

7. Regarding claims 1 and 20, OPENTV discloses a method and use of transmitting interactive television, whereby at least an interactive television application is transmitted inside application-modules in a broadcast stream, said method comprising the step of signaling storage related information of said modules in said broadcast stream  
**[p. 4, 32-35; p. 5, 26-27, pp. 6-7, lines 37-5].**

8. Regarding claim 4, OPENTV discloses a method according wherein the step of signaling storage related information further comprises the step of signaling module identification information in said broadcast stream. **[p. 5, line 15; p. 7, 24-28].**

9. Regarding claim 5, OPENTV discloses a method whereby the step of signaling storage related information comprises signaling said storage related information and/or said module identification information in the Application Information Table **[file table, p. 3, 5-19]** and/or in the Download Information Indication message.

10. Regarding claims 6 and 12, OPENTV discloses a method whereby said module identification information is defined and included in the AIT and consists of two fields, the first field being an organisation\_id **[e.g., version number or carousel ID, p. 5, 13-16]** and the second field being an application\_id **[object identifiers are transmitted, p. 2, line 35]**, whereby said id values are used to identify identical applications **[version numbers are used by the receiver to identify identical versions, for example to filter incoming data objects, p. 5, 24-28].**

11. Regarding claim 9, OPENTV discloses a method whereby said signaling storage related information comprises signaling of properties of a module chosen from code and/or data **[p. 5, 29-30].**

12. Regarding claims 10 and 11, OPENTV discloses a method of receiving an interactive television broadcast stream for recording, whereby at least an interactive television application is comprised in the broadcast stream inside application-modules , said method comprising the steps of

extracting storage related information of said modules from said broadcast stream **[p. 5, 12-18]**, and

recording of modules which are mandatory or optional to record, based on said storage related information **[flags indicate data objects that need to be recorded, p. 5, 24-28]**.

13. Regarding claim 13, OPENTV discloses a method whereby said interactive television is MHP, OpenTV or DASE **[Summary section describes OPEN protocol. pp. 2-3]**.

14. Regarding claim 16, OPENTV discloses a computer-readable medium having embodied thereon a computer program for processing by a computer, the computer program comprising a code segment for signaling storage related information of modules in an interactive television broadcast stream, whereby at least an interactive television application is transmitted inside application-modules in a broadcast stream **[broadcast station 12 and application execution engine perform the method disclosed in OPENTV, see Summary, pp.2-3; p. 4, 11-35]**.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2, 3, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over OPENTV as cited above, in view of Metz et al., US 5,678,539.

17. Regarding claim 2, OPENTV does not disclose using DSMCC modules to transmit application data. Metz teaches this method at **col. 10, 5-12**]. One of ordinary skill would have been motivated to format the data modules disclosed in OPENTV for transmission via DSMCC protocol, in order to provide a standard data format usable by a wide range of receivers. Metz articulates the need for a standard interface protocol **[col. 4, 53-64]**. Using DSMCC provides a standard protocol that can be used across different receiver platforms.

18. Regarding claim 3, OPENTV discloses a method wherein said at least one application object comprises at least one application file object and at least one application directory object, said application file object comprising at least one

application file and said at least one application directory object comprising storage directory information on respective application file **[p. 3, 5-6; p. 5, 14-16]**.

19. Regarding claim 8, OPENTV discloses a system that generates groups of modules with similar storage related information in an object carousel for broadcasting **[carousels are groups of data objects that are transmitted together, with corresponding version numbers and carousel references, pp. 7-8, lines 26-2; p. 8, lines 22-28]**. As discussed above, Metz teaches the use of DSMCC protocol.

20. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over OPENTV as cited above in view of Rohatgi et al., US 5,625,693. OPENTV does not disclose a secure protocol including permissions and mandatory modules. However, Rohatgi teaches a system for authenticating transmissions of interactive applications, in which the storage related information whether or not the module can be recorded. **[cols. 7-8, 44-38]**. The motivation to modify OPENTV with the teachings of Rohatgi is to prevent unauthorized access to content; an advantage that would have been obvious to one skilled in the art of interactive television signaling.

21. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over OPENTV as cited above in view of Rohatgi et al., US 5,625,693.

22. With respect to claim 14, OPENTV discloses an apparatus for recording and/or playing back interactive television, said apparatus being adapted to record and/or playback interactive television to and from a storage medium respectively, said apparatus being adapted to receive interactive television from a broadcast stream, said apparatus comprising

means for extracting storage related information of said modules transmitted inside said broadcast stream **[p. 5, 12-18]**, and

means for recording of modules **[receiving station 18 and mass storage device 16, Fig. 1]**.

23. OPENTV does not disclose a secure protocol that restricts access to “allowed” modules. However, Rohatgi teaches a system for authenticating transmissions of interactive applications, in which the storage related information whether or not the module can be recorded. **[cols. 7-8, 44-38]**. The motivation to modify OPENTV with the teachings of Rohatgi is to prevent unauthorized access to content; an advantage that would have been obvious to one skilled in the art of interactive television signaling.

24. Regarding claim 15, OPENTV discloses an apparatus whereby said storage related information comprises module identification information for modules, and whereby said apparatus further comprises means for preventing recording of more than one application module with identical module identification information on a storage



Art Unit: 2623

medium in said apparatus **[version numbers are used by the receiver to identify identical versions, for example to filter incoming data objects, p. 5, 24-28].**

25. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over OPENTV as cited above. OPENTV discloses and interactive television DSMCC generator allowing specification of storage related information of modules to be transmitted inside application-modules in a broadcast stream **[see summary, pp. 2-3; p.4, 24-31]**. OPENTV does not disclose a GUI, however official notice is taken that providing a GUI to facilitate operator input is a common and well-known in the art of computing and cable distribution. It would have been obvious to modify OPENTV to provide a GUI, allowing service operators to enter and modify object properties, for example carousel flags or other information as discussed in OPENTV **[e.g., p. 5, lines 22-28]**.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY R. NEWLIN whose telephone number is (571)270-3015. The examiner can normally be reached on M-F 9-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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